

INTERNATIONAL SEARCH REPORT

International Application No
PCT/CH2004/000710

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B21D43/05 B21D43/10 B30B15/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21D B30B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 309 430 A (VOLVO AB) 29 March 1989 (1989-03-29) figure 2	1,2,5,6, 11,12
A	EP 0 600 254 A (SCHULER GMBH L) 8 June 1994 (1994-06-08) cited in the application figure 1	1,14
A	DE 31 14 476 A (BILSING ALFRED) 5 January 1983 (1983-01-05) the whole document	1,14



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

21 January 2005

Date of mailing of the international search report

14/02/2005

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Information on patent family members

International Application No

PCT/CH2004/000710

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0309430	A	29-03-1989	SE 464395 B	22-04-1991
			AU 616691 B2	07-11-1991
			AU 2484788 A	17-04-1989
			CA 1309740 C	03-11-1992
			DE 3873238 D1	03-09-1992
			DE 3873238 T2	03-12-1992
			EP 0309430 A1	29-03-1989
			ES 2034393 T3	01-04-1993
			KR 9613718 B1	10-10-1996
			SE 8703629 A	22-03-1989
			WO 8902348 A1	23-03-1989
			US 5046916 A	10-09-1991
EP 0600254	A	08-06-1994	DE 4237313 A1	11-05-1994
			CZ 9302343 A3	18-05-1994
			DE 59309670 D1	05-08-1999
			EP 0600254 A1	08-06-1994
			ES 2135435 T3	01-11-1999
			US 5383348 A	24-01-1995
DE 3114476	A	05-01-1983	DE 3114476 A1	05-01-1983
			EP 0043059 A2	06-01-1982
			ES 8301172 A1	16-02-1983
			US 4492511 A	08-01-1985